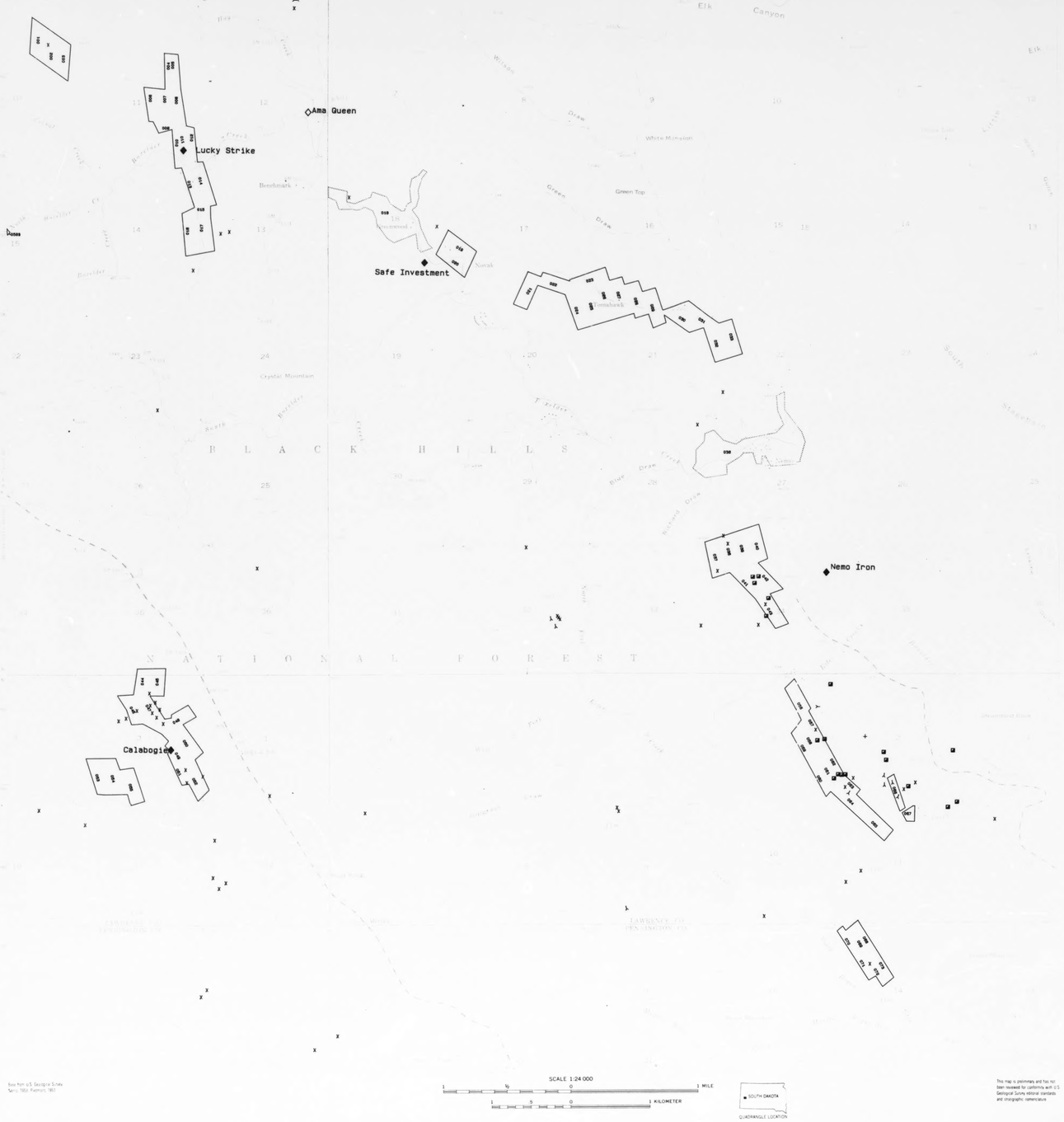
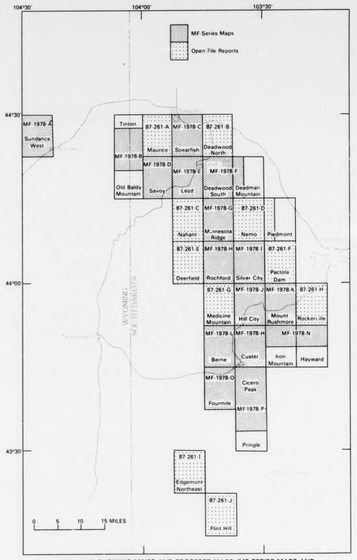
DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY





INDEX MAP SHOWING MINES AND PROSPECT MAPS (MF-SERIES MAPS AND OPEN-FILE REPORTS) IN THE BLACK HILLS REGION

EXPLANATION

Mine--Location known. Distinguished from prosgect by name of mine next to symbol. Alternate names or synonym(s) in parentheses. If there is enough space on the map, the entire mine name and synonym(s) are shown; otherwise, mine name may be abbreviated and synonym(s) deleted from map. Full mine names and all synonyms are shown in the "Alphabetic list of mines"

Open pit or other type of opening

Mine--Approximate location shown. Open pit, shaft, adit, or other type of opening

Prospect

Adit

Shaft

Pit

Multiple pits

Trench

Patented claim--See alphabetic and numeric lists of patented claims. Asterisk (*) indicates part of claim extends into adjacent quadrangle. Dollar sign ($) indicates most of claim is in adjacent quadrangle. Boundaries between claims not shown

Lode claim--Orientation of number parallel to long axis of claim

Placer claim--Number approximately in center of claim

INTRODUCTION

This map is one in a set of 26 maps (see index map) at 1:24,000 scale of the Black Hills region of South Dakota and Wyoming on which are shown a geologic classification of mines, a bibliography of mineral deposits, and locations of active and inactive mines, prospects, and patented mining claims. Some of these maps have been published as U.S. Geological Survey Miscellaneous Field Studies Maps (MF-series) and some as U.S. Geological Survey Open-File Reports (OF-series); see index map. An earlier unpublished version of this set of maps was the data base from which plate 4 (scale 1:250,000) of DeWitt and others (1986) was compiled. Subsequent to that publication the set has been revised and updated and prospects and patented claims have been added. These revised and more detailed 1:24,000-scale maps should be used for the equivalent areas of plate 4 of DeWitt and others (1986).

J. J. Norton, J. A. Redden, J. P. Gries, and W. L. Roberts reviewed the set of maps. Rob Tambrick helped digitize much of the information.

SOURCES OF INFORMATION

Outlines of patented mining claims were obtained from 1:24,000-scale Forest Service Status Plats, available for inspection at the U.S. Forest Service, Rocky Mountains Region, 11,117 West 8th Avenue, Denver, CO 80225. Names of most patented claims were obtained from Wilhelm and others (1978). Other names were obtained from the Lawrence County Courthouse, Deadwood, South Dakota, and the Pennington County Courthouse, Rapid City, South Dakota. Claims have been located as accurately as possible, but this map is not to be used for legal nor precise locations of mining claims.

Locations of mines and prospects were compiled from all available published and unpublished data. The locations of active and inactive mines in this quadrangle were taken from Allaman (1940), Anonymous (1956), Bayley (1972b), Connolly (1933), Connolly and O'Harra (1929), Harrer (1966), O'Harra (1902), U.S. Bureau of Mines (1954, 1986), and U.S. Geological Survey (1986). Also, in some instances, different sources of information gave conflicting location information for mines with the same name. Where possible, this conflict was resolved by comparing the name of the mine to adjacent patented claims, by comparing the description of the deposit to the known geology and topography of the area, or by communication with past owners of the property. In some instances, a unique location was not possible with existing information; in that event the most logical location was chosen. The location of some or many mines on this map may differ from those in present data bases such as the U.S. Bureau of Mines Mineral Inventory Location System (MILS) or the U.S. Geological Survey Mineral Resources Data System (MRDS), formerly the Computerized Resources Information Bank (CRIB).

Locations of prospects in this quadrangle were taken from Bayley (1972a, 1972b), Harrer (1966), and Payne (1979). Because many quadrangles, or parts of quadrangles, have not been mapped in as much detail as other quadrangles, comparison of the density of prospects from one quadrangle to another, or even within one quadrangle, is not warranted. As an example, part of a quadrangle may be shown on the map as having more prospects than another part, but the first part may have been mapped in greater detail than the second part. Similarly, a part of a quadrangle may have many prospects that are not shown on this map because the original source of information did not show prospect pits.

Geologic data for the map are from Bayley (1970, 1972a, 1972b), Bush (1982), DeWitt and others (1986), Fantone (1983), Harrar (1966), Hills (1977, 1979), Hills and Delevaux (1977), Kim (1979), Kleinkopf and Redden (1975), Maranate (1979), Payne (1979), Redden (1975, 1980, 1981), J. A. Redden (unpub. data, 1986), Redden and Norton (1975), Sussman (1984), Woo (1952), and Zartman, Norton, and Stern (1964).

PRECISION OF LOCATION INFORMATION

All mine symbols except the unfilled diamond (◇) indicate that the location of the deposit is known within a 200-foot radius. The type of opening at a mine (adit, shaft, open pit, trench, and others) is designated by one of ten different symbols. The unfilled diamond symbol indicates that the location is known only to within a 1/4 mile radius, and that the type of mine opening is unknown.

Mines and prospects whose locations could not be verified to within less than a 1/4 mile radius were not plotted on the map.

PATENTED CLAIM AND MINE LISTS

Patented mining claims are listed both numerically and alphabetically. Mines are listed alphabetically. For ease in locating the claim or mine on the map, the legal description (section, township, range) is given.

Each patented claim on the map is represented by a number keyed to the numeric and alphabetic listings. Where possible, the claim numbers are plotted approximately in the center of the claim and parallel to its long axis. Boundaries between adjacent claims are not shown. An asterisk (*) following a claim number indicates that most of the claim is in this quadrangle, but it extends into the adjacent quadrangle. A dollar sign ($) following a claim number indicates that most of the claim is in the adjacent quadrangle, but part of it is in this quadrangle. Claims outlined with a solid line are patented lode claims; claims outlined with a dotted line are patented placer claims. Many placer workings on unpatented claims have not been plotted on the maps, principally because the workings lacked a name.

On the map, the most common or most used name of a mine is normally next to its mine symbol. If there is space, any alternate names or synonyms are in parentheses following the most common name. On some maps, where space does not permit showing the first name or any alternate names, the names are shown by a single letter, two letters, or an abbreviation of the name; the mines are keyed to that letter or abbreviation in the alphabetic and numeric lists. Mines with more than one name have the alternate name(s) or synonym(s) shown in parentheses in the alphabetic lists. The first alternate name or synonym is also alphabetized in the alphabetic list of mines; second or third alternate names may not be alphabetized. Uncertain alternate names are not alphabetized and are followed by a query (?).

CLASSIFICATION OF MINES AND DEPOSITS

Mines and deposits are categorized according to geologic criteria of age, environment of formation, and contained metals, as in DeWitt and others (1986, p. 52-53). Deposit-type letter designations (M, S, and so on) corresponding to those in DeWitt and others (1986) for deposit types are used in the alphabetic list of mines. The criteria used for the deposit types are briefly summarized below and are explained more fully in DeWitt and others (1986).

PRINCIPAL TYPES OF DEPOSITS

A--Archean and Proterozoic taconitic iron-formations are stratiform metasedimentary deposits of iron and silica that were formed in a submarine environment about 2.2-2.5 Ga (billion years ago). The metals were concentrated in sedimenary rocks by volcanic or chemical processes.

B--Proterozoic quartz pebble conglomerates are stratiform metasedimentary deposits of uranium, thorium, and minor amounts of gold and chromium that were formed in a shallow-water fluvial environment about 2.2 Ga. The metals were concentrated in sedimentary rocks by sedimentologic processes and movement of low-temperature fluids.

D--Proterozoic veins and shear zones are discordant deposits of gold, silver, lead, and minor amounts of zinc, copper, and arsenic formed in a metamorphic and tectonic environment about 1.6-1.9 Ga. Hydrothermal solutions concentrated the metals in metasedimentary rocks.

Z--Phanerozoic vein deposits are discordant to concordant concentrations of base and precious metals formed in a tectonic environment about 65 Ma. Hydrothermal fluids rich in lead, zinc, and silver, and containing minor amounts of gold deposited sulfide minerals in fissures created by uplift of the Black Hills.

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Alphabetic list of mines

[Deposit-type letter designations are explained in the text]

Deposit Type	Name of Mine	Location
D	Ama Queen	Sec. 12 T3S R4E
D,Z	Calabogie	Sec. 2 T2S R4E
D	Lucky Strike	Sec. 11 T3S R4E
A	Nemo Iron	Sec. 34 T3S R3E
B	Safe Investment	Sec. 18 T3S R5E

Alphabetic list of patented claims

[Asterisk (*) indicates that part of claim extends into adjacent quadrangle; dollar sign ($) indicates that most of claim is in the adjacent quadrangle]

Claim number	Name of Claim	Location
058	A No.1	Sec. 3 T2S R5E
056	A No.2	Sec. 3 T2S R5E
023	Ahern	Sec. 21 T3S R5E
026	Alice	Sec. 21 T3S R5E
048	Anaconda	Sec. 2 T2S R4E
023	Baldy	Sec. 17 T3S R5E
032	Ben Butler	Sec. 21 T3S R5E
011	Bird	Sec. 11 T3S R4E
012	Bird No.2	Sec. 11 T3S R4E
010	Bird No.3	Sec. 11 T3S R4E
008	Black Horse	Sec. 11 T3S R4E
049	Calabogie	Sec. 2 T2S R4E
050	Clara No.4	Sec. 2 T2S R4E
029	Cleveland	Sec. 21 T3S R5E
045	Comstock	Sec. 2 T2S R4E
042	Copper Glint	Sec. 34 T3S R5E
016	Diamond	Sec. 14 T3S R4E
015	Diamond Fr.	Sec. 13 T3S R4E
017	Diamond No.2	Sec. 13 T3S R4E
014	Diamond No.3	Sec. 13 T3S R4E
018	Florman Placer	Sec. 18 T3S R5E
046	Fortune	Sec. 2 T2S R4E
009	Funston Fr.	Sec. 11 T3S R4E
007	Funston No.1	Sec. 11 T3S R4E
006	Funston No.3	Sec. 11 T3S R4E
028	Georgia	Sec. 21 T3S R5E
066	Good Hope Mill Site	Sec. 2 T2S R5E
067	Good Hope Mill Site	Sec. 11 T2S R5E
003	Hailstorm No.2	Sec. 10 T3S R4E
002	Hailstorm No.3	Sec. 10 T3S R4E
001	Hailstorm No.4	Sec. 11 T3S R4E
004	Hazel	Sec. 11 T3S R4E
024	Irene	Sec. 20 T3S R5E
052	June	Sec. 2 T2S R4E
059	Legal Tender No.1	Sec. 3 T2S R5E
005	Lillian	Sec. 11 T3S R4E
022	Lucky Louis	Sec. 17 T3S R5E
054	Madawaska	Sec. 2 T2S R4E
055	Madawaska No.1	Sec. 2 T2S R4E
053	Madawaska No.2	Sec. 2 T2S R4E
058$	Myrtle No.5	Sec. 15 T3S R4E
036	Nemo Placer	Sec. 27 T3S R5E
027	New Jersey	Sec. 21 T3S R5E
021	Nipissing	Sec. 20 T3S R5E
047	Nugget	Sec. 2 T2S R4E
057	Old Age	Sec. 3 T2S R5E
033	Omen	Sec. 22 T3S R5E
031	Omen No.4	Sec. 21 T3S R5E
030	Omen No.5	Sec. 21 T3S R5E
051	Ontario	Sec. 2 T2S R4E
020	Oregon No.5	Sec. 18 T3S R5E
019	Oregon No.6	Sec. 18 T3S R5E
041	Park No.1	Sec. 34 T3S R5E
043	Park No.4	Sec. 34 T3S R5E
072	Rio Tinto	Sec. 14 T2S R5E
070	Rio Tinto Fr.	Sec. 14 T2S R5E
069	Rio Tinto No.1	Sec. 14 T2S R5E
071	Rio Tinto No.2	Sec. 14 T2S R5E
073	Rio Tinto No.3	Sec. 14 T2S R5E
068	Rio Tinto No.4	Sec. 14 T2S R5E
044	Rose	Sec. 2 T2S R4E
061	Rose	Sec. 3 T2S R5E
040	Rose No.1	Sec. 34 T3S R5E
039	Rose No.2	Sec. 34 T3S R5E
038	Rose No.3	Sec. 34 T3S R5E
037	Rose No.4	Sec. 33 T3S R5E
060	Rose No.2	Sec. 3 T2S R5E
063	Washington	Sec. 2 T2S R4E
065	Washington	Sec. 2 T2S R4E
062	Washington	Sec. 2 T2S R4E
013	White Bird	Sec. 11 T3S R4E
064	Wisconsin	Sec. 2 T2S R4E

[Asterisk (*) indicates that part of claim extends into adjacent quadrangle; dollar sign ($) indicates that most of claim is in the adjacent quadrangle]

Claim number	Name of Claim	Location
091	Hailstorm No.1	Sec. 10 T3S R4E
092	Hailstorm No.5	Sec. 10 T3S R4E
093	Hailstorm No.6	Sec. 10 T3S R4E
094	Hazel No.2	Sec. 11 T3S R4E
095	Lillian No.2	Sec. 11 T3S R4E
096	Funston No.4	Sec. 11 T3S R4E
097	Black Horse No.2	Sec. 11 T3S R4E
098	Black Horse No.3	Sec. 11 T3S R4E
099	Funston No.5	Sec. 11 T3S R4E
100	Bird No.4	Sec. 11 T3S R4E
101	Bird No.5	Sec. 11 T3S R4E
102	Bird No.6	Sec. 11 T3S R4E
103	Diamond No.4	Sec. 13 T3S R4E
104	Diamond No.5	Sec. 13 T3S R4E
105	Diamond No.6	Sec. 13 T3S R4E
106	Diamond No.7	Sec. 13 T3S R4E
107	Diamond No.8	Sec. 13 T3S R4E
108	Oregon No.7	Sec. 18 T3S R5E
109	Oregon No.8	Sec. 18 T3S R5E
110	Oregon No.9	Sec. 18 T3S R5E
111	Nipissing No.2	Sec. 20 T3S R5E
112	Lucky Louis No.2	Sec. 17 T3S R5E
113	Baldy No.2	Sec. 17 T3S R5E
114	Irene No.2	Sec. 20 T3S R5E
115	Alice No.2	Sec. 21 T3S R5E
116	New Jersey No.2	Sec. 21 T3S R5E
117	Diamond No.9	Sec. 13 T3S R4E
118	Diamond No.10	Sec. 13 T3S R4E
119	Oregon No.10	Sec. 18 T3S R5E
120	Oregon No.11	Sec. 18 T3S R5E
121	Nipissing No.3	Sec. 20 T3S R5E
122	Lucky Louis No.3	Sec. 17 T3S R5E
123	Baldy No.3	Sec. 17 T3S R5E
124	Irene No.3	Sec. 20 T3S R5E
125	Ahern No.2	Sec. 21 T3S R5E
126	Alice No.3	Sec. 21 T3S R5E
127	New Jersey No.3	Sec. 21 T3S R5E
128	Georgia No.2	Sec. 21 T3S R5E
129	Cleveland No.2	Sec. 21 T3S R5E
130	Omen No.6	Sec. 21 T3S R5E
131	Omen No.7	Sec. 21 T3S R5E
132	Ben Butler No.2	Sec. 21 T3S R5E
133	Omen No.8	Sec. 22 T3S R5E
136	Nemo No.2	Sec. 27 T3S R5E
137	Rose No.5	Sec. 34 T3S R5E
138	Rose No.6	Sec. 34 T3S R5E
139	Rose No.7	Sec. 34 T3S R5E
140	Rose No.8	Sec. 34 T3S R5E
141	Park No.5	Sec. 34 T3S R5E
142	Copper Glint No.2	Sec. 34 T3S R5E
143	Park No.6	Sec. 34 T3S R5E
144	Rose No.9	Sec. 34 T3S R5E
145	Comstock No.2	Sec. 2 T2S R4E
146	Fortune No.2	Sec. 2 T2S R4E
147	Sugar Loaf	Sec. 2 T2S R4E
148	Anaconda No.2	Sec. 2 T2S R4E
149	Calabogie No.2	Sec. 2 T2S R4E
150	Clara No.5	Sec. 2 T2S R4E
151	Ontario No.2	Sec. 2 T2S R4E
152	Junction	Sec. 2 T2S R4E
153	Madawaska No.3	Sec. 2 T2S R4E
154	Madawaska No.4	Sec. 2 T2S R4E
155	Madawaska No.5	Sec. 2 T2S R4E
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157	Old Age No.2	Sec. 3 T2S R5E
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158$	Myrtle No.6	Sec. 15 T3S R4E
159	Legal Tender No.2	Sec. 3 T2S R5E
161	Rose No.10	Sec. 3 T2S R5E
162	Wesley	Sec. 2 T2S R4E
163	Washington No.2	Sec. 2 T2S R4E
164	Wisconsin No.2	Sec. 2 T2S R4E
165	Washington No.3	Sec. 2 T2S R4E
166	Good Hope No.2	Sec. 2 T2S R5E
167	Good Hope No.3	Sec. 2 T2S R5E
168	Rio Tinto No.5	Sec. 14 T2S R5E
169	Rio Tinto No.6	Sec. 14 T2S R5E
170	Rio Tinto No.7	Sec. 14 T2S R5E
171	Rio Tinto No.8	Sec. 14 T2S R5E
172	Rio Tinto No.9	Sec. 14 T2S R5E
173	Rio Tinto No.10	Sec. 14 T2S R5E

MAP OF MINES, PROSPECTS, AND PATENTED MINING CLAIMS, AND CLASSIFICATION OF MINERAL DEPOSITS IN THE NEMO 7 ½ MINUTE QUADRANGLE, AND THE WESTERN ONE-THIRD OF THE PIEDMONT 7 ½ MINUTE QUADRANGLE, BLACK HILLS, SOUTH DAKOTA

By
Ed DeWitt, D. P. Buscher, Anna Burack Wilson, and T.M. Johnson

1988

Base from U.S. Geological Survey
Series 1501 Fairmont 1983

This map is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature.

F1

DRAWING NU
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D-2

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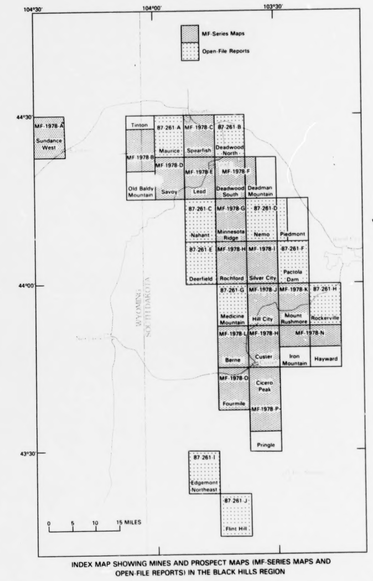

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◆ **Open pit or other type of opening**

◇ **Mine**--Approximate location shown. Open pit, shaft, adit, or other type of opening

Prospect

⊣ **Adit**

◪ **Shaft**

X **Pit**

\+ **Multiple pits**

Trench

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J. J. Norton, J. A. Redden, J. F. Grieve, and W. L. Roberts reviewed the set of maps. Rob Yambrick helped digitize much of the information.

SOURCES OF INFORMATION

Outlines of patented mining claims were obtained from 1:24,000-scale Forest Service Status Plats, available for inspection at the U.S. Forest Service, Rocky Mountains Region, 11,117 West 8th Avenue, Denver, CO 80225. Names of most patented claims were obtained from Wilhelm and others (1978). Other names were obtained from the Lawrence County Courthouse, Deadwood, South Dakota, and the Pennington County Courthouse, Rapid City, South Dakota. Claims have been located as accurately as possible, but this map is not to be used for legal nor precise locations of mining claims.

Locations of mines and prospects were compiled from all available published and unpublished data. The locations of active and inactive mines in this quadrangle were taken from Allman (1940), Anonymous (1956), Bayley (1972b), Connolly (1933), Connolly and O'Harra (1929), Harrer (1966), O'Harra (1902), U.S. Bureau of Mines (1954, 1986), and U.S. Geological Survey (1986). Also, in some instances, different sources of information gave conflicting location information for mines with the same name. Where possible, this conflict was resolved by comparing the name of the mine to adjacent patented claims, by comparing the description of the deposit to the known geology and topography of the area, or by communication with past owners of the property. In some instances, a unique location was not possible with existing information; in that event the most logical location was chosen. The location of some or many mines on this map may differ from those in present data bases such as the U.S. Bureau of Mines Mineral Inventory Location System (MILS) or the U.S. Geological Survey Mineral Resources Data System (MRDS), formerly the Computerized Resources Information Bank (CRIB).

Locations of prospects in this quadrangle were taken from Bayley (1972a, 1972b), Harrer (1966), and Payne (1979). Because many quadrangles, or parts of quadrangles, have not been mapped in as much detail as other quadrangles, comparison of the density of prospects from one quadrangle to another, or even within one quadrangle, is not warranted. As an example, part of a quadrangle may be shown on the map as having more prospects than another part, but the first part may have been mapped in greater detail than the second part. Similarly, a part of a quadrangle may have many prospects that are not shown on this map because the original source of information did not show prospect pits.

Geologic data for the map are from Bayley (1970, 1972a, 1972b), Bush (1982), DeWitt and others (1986), Fantone (1983), Harrar (1966), Hills (1977, 1979), Hills and Delevaux (1977), Kim (1979), Kleinkopf and Redden (1975), Maranate (1979), Payne (1979), Redden (1975, 1980, 1981), J. A. Redden (unpub. data, 1986), Redden and Norton (1975), Sussman (1984), Woo (1952), and Zartman, Norton, and Stern (1964).

PRECISION OF LOCATION INFORMATION

All mine symbols except the unfilled diamond (◇) indicate that the location of the deposit is known within a 200-foot radius. The type of opening at a mine (adit, shaft, open pit, trench, and others) is designated by one of ten different symbols. The unfilled diamond symbol indicates that the location is known only to within a 1/4 mile radius, and that the type of mine opening is unknown.

Mines and prospects whose locations could not be verified to within less than a 1/4 mile radius were not plotted on the map.

PATENTED CLAIM AND MINE LISTS

Patented mining claims are listed both numerically and alphabetically. Mines are listed alphabetically. For ease in locating the claim or mine on the map, the legal description (section, township, range) is given.

Each patented claim on the map is represented by a number keyed to the numeric and alphabetic listings. Where possible, the claim numbers are plotted approximately in the center of the claim and parallel to its long axis. Boundaries between adjacent claims are not shown. An asterisk (*) following a claim number indicates that most of the claim is in this quadrangle, but it extends into the adjacent quadrangle. A dollar sign ($) following a claim number indicates that most of the claim is in the adjacent quadrangle, but part of it is in this quadrangle. Claims outlined with a solid line are patented lode claims; claims outlined with a dotted line are patented placer claims. Many placer workings on unpatented claims have not been plotted on the maps, principally because the workings lacked a name.

On the map, the most common or most used name of a mine is normally next to its mine symbol. If there is space, any alternate names or synonyms are in parentheses following the most common name. On some maps, where space does not permit showing the first name any alternate names, the names are shown by a single letter, two letters, or an abbreviation of the name; the mine is keyed to that letter or abbreviation in the alphabetic and numeric lists. Mines with more than one name have the alternate name(s) or synonym(s) shown in parentheses in the alphabetic lists. The first alternate name or synonym is also alphabetized in the alphabetic list of mines; second or third alternate names may not be alphabetized. Uncertain alternate names are not alphabetized and are followed by a query (?).

CLASSIFICATION OF MINES AND DEPOSITS

Mines and deposits are categorized according to geologic criteria of age, environment of formation, and contained metals, as in DeWitt and others (1986, p. 52-53). Deposit-type letter designations (M, S, and so on) corresponding to those in DeWitt and others (1986) for deposit types are used in the alphabetic list of mines. The criteria used for the deposit types are briefly summarized below and are explained more fully in DeWitt and others (1986).

PRINCIPAL TYPES OF DEPOSITS

A--Archean and Proterozoic taconitic iron-formations are stratiform metasedimentary deposits of iron and silica that were formed in a submarine environment about 2.2-2.5 Ga (billion years ago). The metals were concentrated in sedimentary rocks by volcanic or chemical processes.

B--Proterozoic quartz pebble conglomerates are stratiform metasedimentary deposits of uranium, thorium, and minor amounts of gold and chromium that were formed in a shallow-water fluvial environment about 2.2 Ga. The metals were concentrated in sedimentary rocks by sedimentologic processes and movement of low-temperature fluids.

D--Proterozoic veins and shear zones are discordant deposits of gold, silver, lead, and minor amounts of zinc, copper, and arsenic formed in a metamorphic and tectonic environment about 1.8-1.9 Ga. Hydrothermal solutions concentrated the metals in metasedimentary rocks.

Z--Phanerozoic vein deposits are discordant to concordant concentrations of base and precious metals formed in a tectonic environment about 65 Ma. Hydrothermal fluids rich in lead, zinc, and silver, and containing minor amounts of gold deposited sulfide minerals in fissures created by uplift of the Black Hills.

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Alphabetic list of mines

[Deposit-type letter designations are explained in the text]

Deposit Type	Name of Mine	Location
D	Ama Queen	Sec. 12 T3N R4E
D,Z	Calabogie	Sec. 2 T2N R4E
D	Lucky Strike	Sec. 11 T3N R4E
A	Nemo Iron	Sec. 34 T3N R5E
B	Safe Investment	Sec. 18 T3N R5E

Alphabetic list of patented claims

[Asterisk (*) indicates that part of claim extends into adjacent quadrangle; dollar sign ($) indicates that most of claim is in the adjacent quadrangle]

Claim number	Name of Claim	Location
058	A No.1	Sec. 3 T2N R5E
056	A No.2	Sec. 3 T2N R5E
025	Ahern	Sec. 21 T3N R5E
026	Alice	Sec. 21 T3N R5E
048	Anaconda	Sec. 2 T2N R4E
023	Baldy	Sec. 17 T3N R5E
032	Ben Butler	Sec. 21 T3N R5E
011	Bird	Sec. 11 T3N R4E
012	Bird No.2	Sec. 11 T3N R4E
010	Bird No.3	Sec. 11 T3N R4E
008	Black Horse	Sec. 11 T3N R4E
049	Calabogie	Sec. 2 T2N R4E
050	Clara No.4	Sec. 2 T2N R4E
029	Cleveland	Sec. 21 T3N R5E
045	Comstock	Sec. 2 T2N R4E
042	Copper Glint	Sec. 34 T3N R5E
016	Diamond	Sec. 14 T3N R4E
015	Diamond Fr.	Sec. 13 T3N R4E
017	Diamond No.2	Sec. 13 T3N R4E
014	Diamond No.3	Sec. 13 T3N R4E
018	Florman Placer	Sec. 18 T3N R5E
046	Fortune	Sec. 2 T2N R4E
009	Funston Fr.	Sec. 11 T3N R4E
007	Funston No.1	Sec. 11 T3N R4E
006	Funston No.3	Sec. 11 T3N R4E
028	Georgia	Sec. 21 T3N R5E
066	Good Hope Mill Site	Sec. 2 T2N R5E
067	Good Hope Mill Site	Sec. 11 T2N R5E
003	Hallstorm No.2	Sec. 10 T3N R4E
002	Hallstorm No.3	Sec. 10 T3N R4E
001	Hallstorm No.4	Sec. 10 T3N R4E
004	Hazel	Sec. 14 T3N R4E
024	Irene	Sec. 20 T3N R5E
052	Jane	Sec. 17 T3N R5E
059	Legal Tender No.1	Sec. 3 T2N R5E
005	Lillian	Sec. 11 T3N R4E
022	Lucky Louis	Sec. 17 T3N R5E
054	Madawaska	Sec. 2 T2N R4E
055	Madawaska No.1	Sec. 2 T2N R4E
053	Madawaska No.2	Sec. 2 T2N R4E
0585	Myrtle No.5	Sec. 15 T3N R4E
036	Nemo Placer	Sec. 27 T3N R5E
027	New Jersey	Sec. 21 T3N R5E
021	Nipissing	Sec. 20 T3N R5E
047	Nugget	Sec. 2 T2N R4E
057	Old Age	Sec. 3 T2N R5E
033	Omen	Sec. 27 T3N R5E
031	Omen No.4	Sec. 21 T3N R5E
030	Omen No.5	Sec. 21 T3N R5E
051	Ontario	Sec. 2 T2N R4E
020	Oregon No.5	Sec. 18 T3N R5E
019	Oregon No.6	Sec. 18 T3N R5E
041	Park No.1	Sec. 34 T3N R5E
043	Park No.4	Sec. 34 T3N R5E
072	Rio Tinto	Sec. 14 T2N R5E
070	Rio Tinto Fr.	Sec. 14 T2N R5E
069	Rio Tinto No.1	Sec. 14 T2N R5E
071	Rio Tinto No.2	Sec. 14 T2N R5E
073	Rio Tinto No.3	Sec. 14 T2N R5E
068	Rio Tinto No.4	Sec. 14 T2N R5E
044	Rose	Sec. 2 T2N R4E
061	Rose	Sec. 3 T2N R5E
060	Rose No.1	Sec. 34 T3N R5E
039	Rose No.2	Sec. 34 T3N R5E
038	Rose No.3	Sec. 34 T3N R5E
037	Rose No.4	Sec. 3 T2N R5E
040	Tender No.2	Sec. 3 T2N R5E
063	Washington	Sec. 3 T2N R5E
065	Washington Extension	Sec. 11 T2N R5E
062	Westward	Sec. 3 T2N R5E
013	White Horse	Sec. 14 T3N R4E
064	Wisconsin	Sec. 3 T2N R5E

Numerical list of patented claims

[Asterisk (*) indicates that part of claim extends into adjacent quadrangle; dollar sign ($) indicates that most of claim is in the adjacent quadrangle]

Claim number	Name of Claim	Location
001	Hallstorm No.4	Sec. 10 T3N R4E
002	Hallstorm No.3	Sec. 10 T3N R4E
003	Hallstorm No.2	Sec. 10 T3N R4E
004	Hazel	Sec. 14 T3N R4E
005	Lillian	Sec. 11 T3N R4E
006	Funston No.3	Sec. 11 T3N R4E
007	Funston No.1	Sec. 11 T3N R4E
008	Black Horse	Sec. 11 T3N R4E
009	Funston Fr.	Sec. 11 T3N R4E
010	Bird No.3	Sec. 11 T3N R4E
011	Bird	Sec. 11 T3N R4E
012	Bird No.2	Sec. 11 T3N R4E
013	White Horse	Sec. 13 T3N R4E
014	Diamond No.3	Sec. 13 T3N R4E
015	Diamond Fr.	Sec. 14 T3N R4E
016	Diamond	Sec. 14 T3N R4E
017	Diamond No.2	Sec. 13 T3N R4E
018	Florman Placer	Sec. 18 T3N R5E
019	Oregon No.6	Sec. 18 T3N R5E
020	Oregon No.5	Sec. 18 T3N R5E
021	Nipissing	Sec. 20 T3N R5E
022	Lucky Louis	Sec. 17 T3N R5E
023	Baldy	Sec. 17 T3N R5E
024	Irene	Sec. 20 T3N R5E
025	Ahern	Sec. 21 T3N R5E
026	Alice	Sec. 21 T3N R5E
027	New Jersey	Sec. 21 T3N R5E
028	Georgia	Sec. 21 T3N R5E
029	Cleveland	Sec. 21 T3N R5E
030	Omen No.5	Sec. 21 T3N R5E
031	Omen No.4	Sec. 21 T3N R5E
032	Ben Butler	Sec. 22 T3N R5E
033	Omen	Sec. 27 T3N R5E
036	Nemo Placer	Sec. 33 T3N R5E
037	Rose No.4	Sec. 3 T2N R5E
038	Rose No.3	Sec. 34 T3N R5E
039	Rose No.2	Sec. 34 T3N R5E
040	Rose No.1	Sec. 34 T3N R5E
041	Park No.1	Sec. 34 T3N R5E
042	Copper Glint	Sec. 34 T3N R5E
043	Park No.4	Sec. 34 T3N R5E
044	Rose	Sec. 2 T2N R4E
045	Comstock	Sec. 2 T2N R4E
046	Fortune	Sec. 2 T2N R4E
047	Nugget	Sec. 2 T2N R4E
048	Anaconda	Sec. 2 T2N R4E
049	Calabogie	Sec. 2 T2N R4E
050	Clara No.4	Sec. 2 T2N R4E
051	Ontario	Sec. 2 T2N R4E
052	Jane	Sec. 2 T2N R4E
053	Madawaska No.2	Sec. 2 T2N R4E
054	Madawaska	Sec. 2 T2N R4E
055	Madawaska No.1	Sec. 2 T2N R4E
056	A No.2	Sec. 3 T2N R5E
057	Old Age	Sec. 3 T2N R5E
058	A No.1	Sec. 3 T2N R5E
059	Legal Tender No.1	Sec. 3 T2N R5E
060	Tender No.2	Sec. 3 T2N R5E
061	Rose	Sec. 3 T2N R5E
062	Westward	Sec. 3 T2N R5E
063	Washington	Sec. 3 T2N R5E
064	Wisconsin	Sec. 3 T2N R5E
065	Washington Extension	Sec. 11 T2N R5E
066	Good Hope Mill Site	Sec. 2 T2N R5E
067	Good Hope Mill Site	Sec. 11 T2N R5E
068	Rio Tinto No.4	Sec. 14 T2N R5E
069	Rio Tinto No.1	Sec. 14 T2N R5E
070	Rio Tinto Fr.	Sec. 14 T2N R5E
071	Rio Tinto No.2	Sec. 14 T2N R5E
072	Rio Tinto	Sec. 14 T2N R5E
073	Rio Tinto No.3	Sec. 14 T2N R5E

MAP OF MINES, PROSPECTS, AND PATENTED MINING CLAIMS, AND CLASSIFICATION OF MINERAL DEPOSITS IN THE NEMO 7 ½ MINUTE QUADRANGLE, AND THE WESTERN ONE-THIRD OF THE PIEDMONT 7 ½ MINUTE QUADRANGLE, BLACK HILLS, SOUTH DAKOTA

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